

REMARKS

I. Preliminary Remarks

Independent claims 1, 15, 22, 26, 27, and 31 have been amended to clarify that the audio signal, as originally recited, related to a full audible frequency band including high, mid, and low range of frequencies where the low range represents the bass content. Note that the above amendments to independent claims 1, 15, 22, 26, 27, and 31 do not limit the scope of the claims, rather the above amendments clarifies that the audio input signal, as originally recited, has a full audible range of frequencies where the low range of the frequencies represents the bass content.

Applicant wishes to express his appreciation to the Examiner for January 21, 2005 telephone interview. The above amendments to the claims and the following remarks are in accordance with the material discussed in the telephone interview.

II. Objection and Rejections to claims 27 and 31:

Claim 31 has been objected to because of informalities. In response, claim 31 has been amended to clarify that “an output terminal is coupled to an audio speaker.” Accordingly, the Applicant respectfully requests that the objection to claim 31 be withdrawn. In addition, claim 31 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. In response, claim 31 has been amended to recite that the “automatic loudness compensation circuit” comprises a “filter circuit.” Accordingly, the Applicant respectfully requests that the rejection to claim 31 under 35 U.S.C. 112, second paragraph, be withdrawn.

Claims 27 and 31 have been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. In response, claims 27 and 31 have been amended to recite, in part, that “a summing circuit [is] coupled to the automatic loudness compensation circuit, the summing circuit summing the audio input signal and the low pass signal to generate an output signal,” which is fully supported and enabled as shown in Figure 4 and the corresponding paragraph 38 of the original application. As such, the Applicant respectfully

submits that the rejection of claims 27 and 31 under 35 U.S.C. 112, first paragraph, be withdrawn.

II. References Cited

In the third Office Action, claims 1-16, 19-27, and 31 have been rejected as being either anticipated by Kimura (US Patent No. 5,172,358) and/or obvious in view of combination of Kimura and other secondary references. Applicant respectfully traverses the rejections for the reasons set forth below.

Kimura discloses that the digital low-pass filter 13 extracts a low frequency component only in the output data of the volume 11 and supplies it to a level detection circuit 16. See Col. 2, lines 61 to 64. The same is true for the high frequency component. See Col. 3, lines 1 to 4. As such, the low frequency region boosting circuit 15 amplifies the low frequency component only in the output of the volume 11, and the high frequency region boosting circuit 19 amplifies the high frequency component only in the output of the volume 11. In contrast, the present invention is generally directed to adjusting the corner frequency in an inverse relationship to the input audio signal rather than based only the low frequency level or bass level portion of the audio signal. As clarified in the above amendment, the input audio signal relates to a full audible frequency band with high, mid, and low range of frequencies where the low range represents a bass content. Accordingly, the Applicant respectfully submits the independent claims 1, 15, 22, 26, 27, and 31, and their respective dependent claims are in condition for allowance over Kimura and the secondary references.

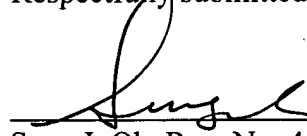
In view of the foregoing, it is respectfully submitted that the claims in the application patentably distinguish over the cited and applied references and are in condition for allowance. Reexamination and reconsideration of the application, as amended, are respectfully requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is respectfully requested to call Applicant's undersigned representative at (213) 689-5176 to discuss the steps necessary for placing the application in condition for allowance.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1853. Should such additional fees be associated with an extension of time, applicant respectfully requests that this paper be considered a petition therefore.

Respectfully submitted,

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